CAPT Joel Lees
I MEF Surgeon

FORWARD RESUSCITATIVE SURGERY SYSTEM (FRSS)

Mission Area Analysis revealed:

USMC Health Service Support units, as currently configured, are too heavy and lack the mobility needed to support Expeditionary Maneuver Warfare (EMW).

- **EMW and Ship to Objective Maneuver (STOM) require that shore based Combat Service Support assets be as *light* and *mobile* as practical.**

- **Over the horizon force projection will increase the distances and transit time involved in casualty evacuation.**

FORWARD RESUSCITATIVE SURGERY SYSTEM (FRSS)

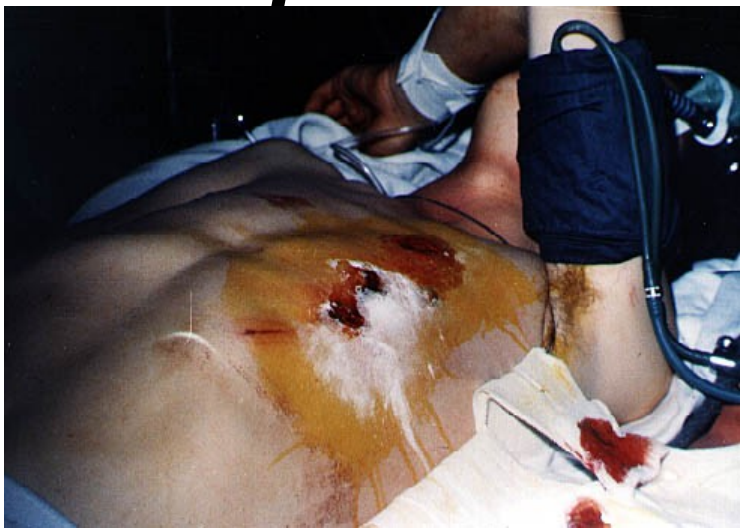
What is FRSS and what will it do?

- **Light, mobile and flexible,surgically capable USMC HSS elements.**
- **Deployable with set up/strike time of 40/60 minutes**
- **Scalable part of Surgical Company**

FORWARD RESUSCITATIVE SURGERY SYSTEM (FRSS)

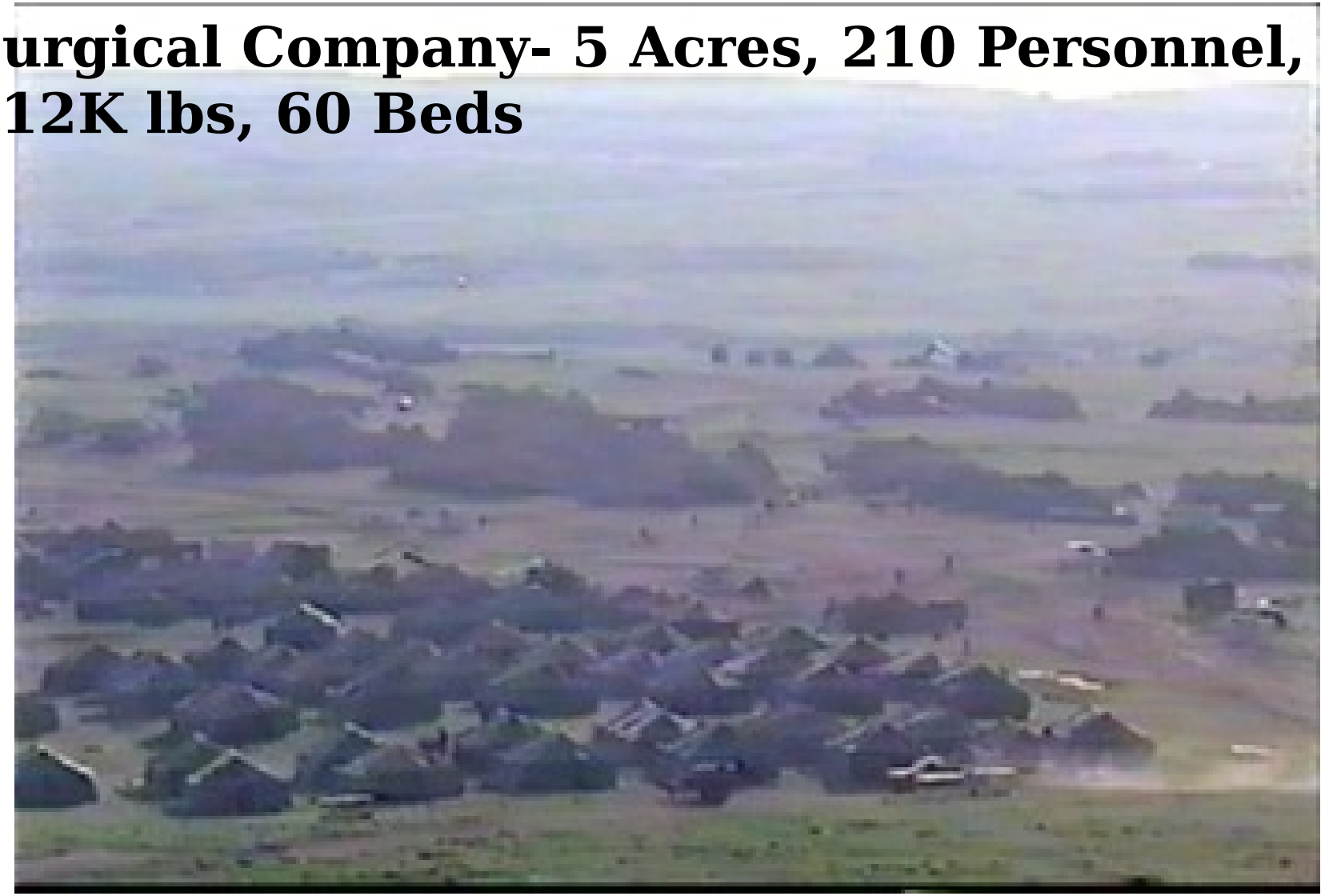
Why do we need FRSS in EMW?

For every casualty who dies of wounds in a hospital, nine have died prior to arriving.



- **Of those who die, some are salvageable, if they make it to surgery.**
- **Those are the target audience for FRSS**

Surgical Company- 5 Acres, 210 Personnel, 212K lbs, 60 Beds



205
305
Vestibule

Features

- Night-Time Light Integrity
- Air mobility, rapid erect, and strike times
- Complete removable inner linings
- Air distribution ducts
- Pre-wired with electrical outlets

FORWARD RESUSCITATIVE SURGERY SYSTEM (FRSS)

FRSS Mission flexibility

- **FRSS can usefully augment any Marine medical unit:**
  - **Battalion Aid Station (BAS)**
  - **Shock Trauma Platoon (STP)**
  - **Surgical Company**
  - **Any theater field MTF**
- **Primary Mission to perform combat casualty care and salvage/life saving surgery under austere conditions.**
- ***Ability to move and set up transient operations to fill a temporary gap in HSS for peaks in anticipated casualties.***

FORWARD RESUSCITATIVE SURGERY SYSTEM (FRSS)

Where does FRSS apply in echelons of HSS support?

FRSS

ECHELON I	ECHELON II	ECHELON III	ECHELON IV & V
Buddy Aid BAS STP	Surgical Company Casualty Receiving Ships *Eg BHR, Peleliu*	Fleet Hospitals Hospital Ships	Out of theater Medical Center

Marine Health Service

FORWARD RESUSCITATIVE SURGERY SYSTEM (FRSS)

- **Required Operational Capability (ROC)**
  - ❑ **18 patients over 48 hrs before resupply.**
  - ❑ **Stabilizing Surgical and Medical Treatment of Combat trauma patient conditions.**
  - ❑ **Examples:**
    - **Sucking Chest Wound**
    - **GSW to Head**
    - **Multiple Abdominal Wounds**
    - **Vascular laceration**

FORWARD RESUSCITATIVE SURGERY SYSTEM (FRSS)

Table of Organization

- General Surgeon (2)
- Anesthesiologist (1)
- Critical Care RN (1)
- Corpsman (IDC) (1)
- Corpsman (OR) (2)
- Corpsman (FMT) (1)

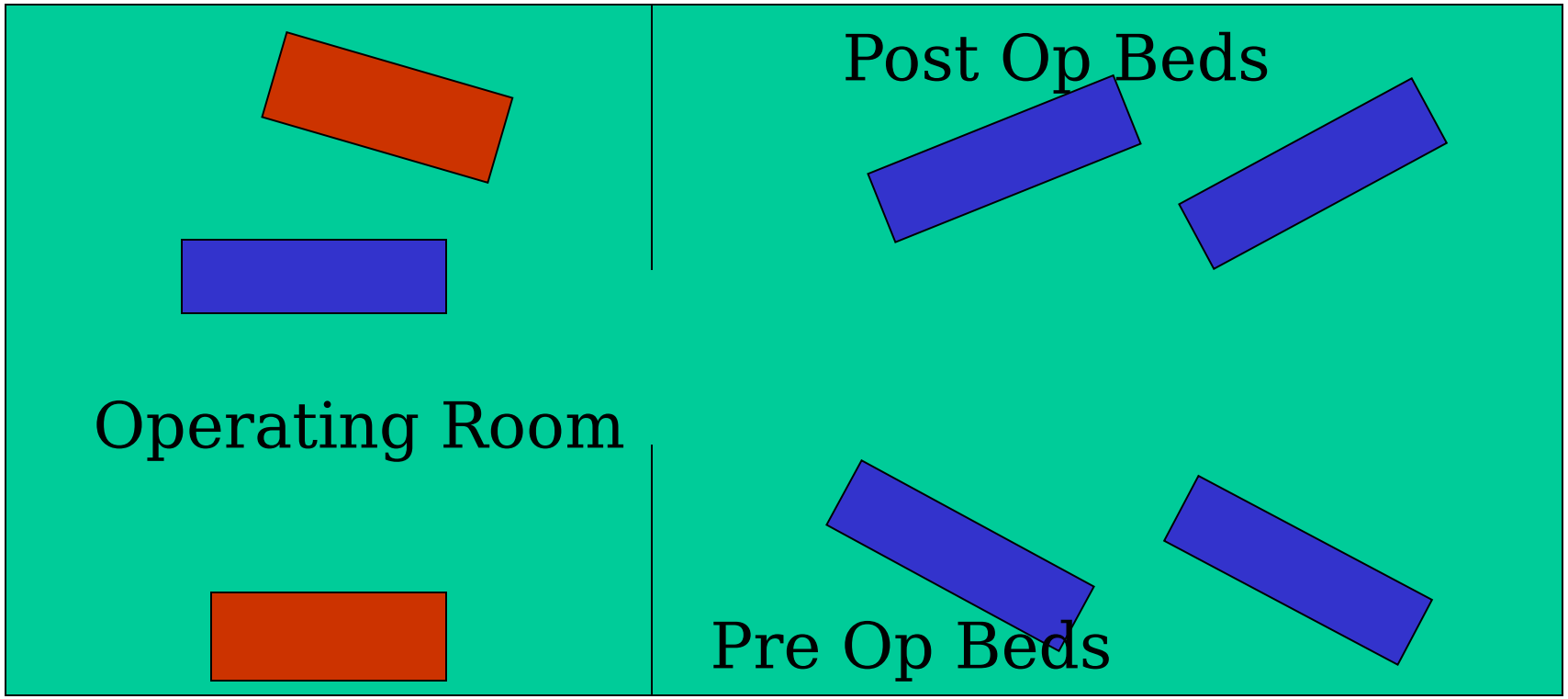
- Total (8) PERS

Table of Equipment

- Weight 5500 lbs
- Cube 215
- Pallets 2 (USAF)
- Rolling Stock
  - M997 (1)
  - M998 (1)
  - M101 Trailer (2)
  - Weight 13,725

- 18136 lbs

FRSS Footprint - 1700 Sq ft



Supplies

Litters on Stands

205

FORWARD RESUSCITATIVE SURGERY SYSTEM (FRSS)

Movement Options

- **Embark on shipping or airlift**
  - **Debark by surface means to shore (LCAC, LCU)**
  - **Ground transport:**
    - **HMMWV ((1) M997 & (1) M998) and and (2) M101 trailers.**
- **Strike and re-load onto rotary wing:**
  - **Externally - CH-46**
  - **Internally – CH-53 with room to spare or MV-22B**

FORWARD RESUSCITATIVE SURGERY SYSTEM (FRSS)

Current status of the project:

- **MARCORSYSCOM & MCCDC working collaboratively on Form Fit Function (F3) and Field Warfighter Evaluation**
- **I MEF has the lead with 1st Med Battalion designated as Test Director and 1st FSSG as oversight.**
- **Has been undergoing evaluation since February 01 and was evaluated during KB01 KB X and Bright Star. Evaluation, Refinement ongoing.**

FORWARD RESUSCITATIVE SURGERY SYSTEM (FRSS)

Cost and timeline

- **$120K is the planning benchmark centrally paid for. (This is a moving target though)**
- **Current planned acquisition is for FY02.**
- **First recipient is planned to be I MEF (1st Med Bn) to receive 4 sets.**

FORWARD RESUSCITATIVE SURGERY SYSTEM (FRSS)

What are the current challenges and issues?

- **Tentage**
  - **MARCORSYSCOM and MCCDC have changed to (Stateside) vendor**
  - **BASEX fulfills design criteria, weight, and cube, etc.**
- **Two tents needed with vestibule for operative patient care**

FORWARD RESUSCITATIVE SURGERY SYSTEM (FRSS)

What are the current challenges and issues? (cont'd)

- **Rapid but deliberate fielding!**
- **FRSS was asked for by name by CG TF 58 after he saw it at Bright Star**
  - **Wasn't ready for fielding (with resupply the showstopper) so sent less robust surgical sections from Medical BN Less maneuverable than CG desired**
- **POM funding FY-02** -

FORWARD RESUSCITATIVE SURGERY SYSTEM (FRSS)

Summary

- **FRSS will provide I MEF with the lightest and most mobile Surgically Capable medical element to care for casualties in EMW**
- **Deployable and mobile with set up/strike time of 40/60 minutes.**

FORWARD RESUSCITATIVE SURGERY SYSTEM (FRSS)

Summary (cont'd)

- **FRSS Surgical Team and unit that can be flexibly employed and applied in the battlespace to support echelon 1 and 2.**
  - **1st MEB**
  - **Consequence Management**
  - **Disaster Relief**
  - **Peace Operations.**
- **It is a NEW part of Surgical Company, not a replacement for it**

FORWARD RESUSCITATIVE SURGERY SYSTEM (FRSS)

Supporting Marine Corps Vision and Strategy

Demo-